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NOTICE OF ALLOWANCE AND FEE(S) DUE

23599 7590 04/22/2011 MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201 EXAMINER

SPIVACK, PHYLLIS G

ART UNIT PAPER NUMBER

1629

DATE MAILED: 04/22/2011

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661 588	09/15/2003	Sven Schreder	MERCK-2168D1	8058

TITLE OF INVENTION: PHARMACEUTICAL PREPARATION

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	07/22/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN <u>THREE MONTHS</u> FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. <u>THIS STATUTORY PERIOD CANNOT BE EXTENDED.</u> SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

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III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

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23599 MILLEN, WH 2200 CLARENI SUITE 1400 ARLINGTON, V	OON BLVD.	^{/2011} BRANIGAN, P.C		I her State addre trans	Certi reby certify that this is Postal Service wi essed to the Mail mitted to the USPT	ificate Fee(s th suff Stop O (57)	of Mailing or Transn) Transmittal is being ficient postage for first ISSUE FEE address a 1) 273-2885, on the dat	deposited with the United class mail in an envelope above, or being facsimile e indicated below.
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APPLICATION NO.	APPLICATION NO. FILING DATE		FIRST NAMED INVEN		NTOR ATTORNEY DOCKET NO		RNEY DOCKET NO.	CONFIRMATION NO.
10/661,588	09/15/2003		Sven Schreder			M	ERCK-2168D1	8058
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nonprovisional	NO	\$1510	\$300		\$0	\$1810		07/22/2011
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SPIVACK, I	PHYLLIS G	1629	514-567000		'			
Change of correspondence address or indication of "Fee Address" (37 FR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(1) the names of u or agents OR, alter (2) the name of a street street attorney	f a single firm (having as a member a rney or agent) and the names of up to tent attorneys or agents. If no name is				
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lease check the appropri	iate assignee category or	categories (will not be pr	rinted on the patent):		Individual	porati	on or other private grou	up entity Government
a. The following fee(s) are submitted: Issue Fee Publication Fee (No small entity discount permitted) Advance Order - # of Copies			 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) A check is enclosed. Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). 					
_ ~ .	tus (from status indicated s SMALL ENTITY statu	*	☐ b. Applicant is no	o long	ger claiming SMAL	L ENT	TTY status. See 37 CF	R 1.27(g)(2).
OTE: The Issue Fee and terest as shown by the i	d Publication Fee (if requeecords of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other the Office.	nan th	ne applicant; a regis	tered a	ttorney or agent; or the	assignee or other party in
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10/661,588	10/661,588 09/15/2003 Sven Schreder		MERCK-2168D1	8058		
23599 75	90 04/22/2011	EXAMINER				
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			SPIVACK, PHYLLIS G			
			ART UNIT PAPER NUMBER			
			1629			

DATE MAILED: 04/22/2011

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 106 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 106 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No.	Applicant(s)		
	10/661.588	SCHREDER ET AL.		
Notice of Allowability	Examiner	Art Unit		
	PHYLLIS SPIVACK	1629		
The MAILING DATE of this communication app All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85 NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT F of the Office or upon petition by the applicant. See 37 CFR 1.31	ears on the cover sheet wi 5 (OR REMAINS) CLOSED in) or other appropriate comm RIGHTS. This application is s	ith the correspondence address n this application. If not included unication will be mailed in due course. THIS		
1. $igtimes$ This communication is responsive to <u>the Amendment filed</u>	d April 8, 2011.			
2. 🔀 The allowed claim(s) is/are <u>1,3-5 and 9-18</u> .				
 3. Acknowledgment is made of a claim for foreign priority units a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have 	e been received. e been received in Applicatio	on No		
International Bureau (PCT Rule 17.2(a)). * Certified copies not received:				
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDON! THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submin INFORMAL PATENT APPLICATION (PTO-152) which give	MENT of this application. nitted. Note the attached EX	AMINER'S AMENDMENT or NOTICE OF		
5. CORRECTED DRAWINGS (as "replacement sheets") mu	st be submitted.			
(a) ☐ including changes required by the Notice of Draftsper		w (PTO-948) attached		
1) ☐ hereto or 2) ☐ to Paper No./Mail Date				
(b) ☐ including changes required by the attached Examiner Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR)	1.84(c)) should be written on t	he drawings in the front (not the back) of		
each sheet. Replacement sheet(s) should be labeled as such in	the header according to 37 CF	FR 1.121(d).		
 DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT 				
 Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08),	6. ☐ Interview S Paper No. 7. ☐ Examiner's	formal Patent Application ummary (PTO-413), /Mail Date Amendment/Comment Statement of Reasons for Allowance		
/Phyllis G. Spivack/				
Primary Examiner, Art Unit 1629				

REASONS FOR ALLOWANCE

The following is an Examiner's statement of Reasons for Allowance:

In the last Office Action claims 1, 3-5 and 9-16 remained rejected under 35 U.S.C. 103(a) as being unpatentable over Reynolds et al., U.S. Patent 3,808,332, in view of Mitra et al., 5,955,105, and further in view of Remington's Pharmaceutical Sciences. It was asserted Reynolds teaches a combination of L-thyroxine and Ltriiodothyronine that are physically admixed. Reynolds teaches a concentration range of I-thyroxine of 100-300 mcg. Fillers such as lactose, maize starch and microcrystalline cellulose are conventional excipients. A micronized form of levothyroxine with a particle size between 5 and 25 µm is conventional. Mitra teaches stability problems are associated with pharmaceutical preparations comprising thyroxine. Pharmaceutical preparations containing levothyroxine hormone exhibit a relatively short shelf life, and conditions of high humidity and temperature result in stability issues. Remington, teaches materials commonly used as binders include starch, gelatin and sugars, such as sucrose, glucose, dextrose, molasses and lactose. These binders impart a cohesiveness to the tablet formulation which insures that the tablet remains intact after compression.

Applicants have amended independent claims 1, 9 and 10 such that the recited pharmaceutical compositions have 5 mg of gelatin as a binder. Support for the amendment is demonstrated in Examples 2 and 3 on pages 6-7. According to Kokil et al., <u>AAPS PharmSciTech</u>, which is provided only to show further the state of the art, gelatin is well known as a binder in the art of pharmaceutical formulation. It is useful in

tablet formulations to provide high tensile strength, good compressibility, compactability and improved rheological properties. Mitra fails to teach specific binders for use in a solid preparation comprising levo-thyroxine. There is no teaching or suggestion in the prior art to prepare a solid pharmaceutical composition comprising levo-thyroxine with 5 mg of gelatin as a binder and fillers, wherein the preparation is free of organic solvent.

Accordingly, the rejection of record under 35 U.S.C. 103 is withdrawn. Claims 1, 3-5 and 9-16 are allowed in view of the contemporary knowledge of the art.

Any comments considered necessary by Applicants must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication from the Examiner should be directed to Phyllis G. Spivack whose telephone number is 571-272-0585. The Examiner can normally be reached on 10:30 AM-7 PM.

If attempts to reach the Examiner by telephone are unsuccessful after one business day, the Examiner's supervisor, Jeff Lundgren, can be reached on 591-272-5541. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/661,588 Page 4

Art Unit: 1629

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

April 13, 2011

/Phyllis G. Spivack/ Primary Examiner, Art Unit 1614